

Environmental Literacy Program

NOAA's Environmental Literacy Program supports grants and partnerships that inform, educate, and inspire a diverse pool of educators, students, and the public to use science to improve stewardship of ecosystems and increase resilience to environmental hazards. These strategic investments support institutions and networks in carrying out formal (K-12) and informal education activities at local, regional, and national levels.



Learners work closely with Monterey Bay National Marine Sanctuary to further their understanding and experience of the natural environment. Photo courtesy of California State University, Monterey Bay's Camp SEA Lab.

Environmental Literacy Grants (ELG) are highly competitive and attract the Nation's premier education institutions in advancing the Program's goals. The Environmental Literacy Grant competitions are the longest standing and most comprehensive national funding opportunities focused on environmental literacy. These investments have resulted in a dramatic increase in the coverage of NOAA-related topics in exhibitions, K-12 curricula, online educational resources, citizen science opportunities, civic engagement events, out-of-school programs, and professional development for formal and informal educators.

2015 Program Impacts

- ❖ More than **100 science education institutions** offered NOAA-supported, compelling, up-to-date information on the ocean, coasts, Great Lakes, weather, and climate to over 60 million people through formal and informal education programs including exhibits such as NOAA's Science On a Sphere®.
- ❖ More than **200,000 youth and adult learners** engaged in NOAA-supported, high-quality learning experiences designed to increase their understanding and ability to apply concepts focused on improving environmental literacy.
- ❖ More than **2,000 formal and informal educators** received NOAA-supported professional development using evidence-based practices and conveying Earth system science in compelling and relevant ways.



8th grade students study global weather on NOAA's Science On a Sphere® (SOS) in Boulder, CO at one of 130 SOS Network locations around the world. Photo by Will von Dauster, NOAA.

Since 2005, the Environmental Literacy Program has **supported 101 projects through grants totaling more than \$63 million**. Projects funded in 2015 include science centers around the U.S. holding public, deliberative forums to strengthen community resilience by addressing real-world issues of concern to local communities, such as rising sea levels, extreme precipitation, heat waves, and drought. Low-income middle and high-school students in New York State preparing for the impact of a changing climate using a new, integrated curriculum that teaches about regionally relevant climate change impacts from multiple

perspectives. And, 12-18 year old students in Washington State serving as leaders through a youth development program where they will develop and implement service projects to conserve local ecosystems and increase the resiliency of their communities to extreme weather events and changing climate.

In addition, NOAA supports grant-funded projects and long-term partnerships with significant in-kind contributions that enable the education community to incorporate and deliver the latest scientific information on the topics of the ocean, coasts, weather and climate.

Evaluation and Advancing the Field

The Environmental Literacy Program builds capacity within the fields of environmental education and science, technology, engineering and mathematics education to utilize NOAA assets in educationally effective ways through grant-funded projects and strategic partnerships with well-established organizations and networks. Projects and partners receiving support from NOAA are evaluated on their use of activity-specific, evidence-based practices. Additionally, projects are expected to conduct comprehensive project evaluation that assesses how well and to what extent the approach achieved the project goals and objectives as well as NOAA's stated goals. Evaluation reports are reviewed by NOAA and data on outcomes and outputs are collected and aggregated to assess program-level impacts. Program successes and challenges are shared through publications, presentations at professional meetings, and digital libraries specific to the field.



Citizen science opportunities directly engage and involve learners in the scientific process. Photo courtesy of NatureBridge.